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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/598,538	06/21/2000	Carl W. Shonk	60,314-098	7679

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EXAMINER

TRAN, DALENA

ART UNIT PAPER NUMBER

3661

DATE MAILED: 02/21/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/598,538

Applicant(s)

SHONK, CARL W.

Examiner

Dalena Tran

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 31 December 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-4,6-11 and 13-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 18 and 20-22 is/are allowed.
- 6) ☒ Claim(s) 1-4,6-11,13-17,19 and 23-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### **Notice to Applicant(s)**

1. This office action is responsive to the amendment filed on 12/31/02. As per request, claims 1,6,9,13,18, and 20-24 have been amended, claims 5 and 12 cancelled. Thus, claims 1-4, 6-11, and 13-25 are pending.
2. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-3,6,14-16,23, and 25, are rejected under 35 U.S.C.103(a) as being unpatentable over Zijderhand (5,598,167) in view of Holland (6,321,091).

As per claims 1,6, and 14, Zijderhand discloses a method for transmitting the location of a vehicle to a location remote from the vehicle comprising the steps: determining a location of the vehicle relative to a road network defined as a first location, and determining a new location of the vehicle relative to a road network defined as a second location (see the abstract; column 2, lines 10-33; and columns 3-6, lines 34-13). Zijderhand does not disclose communicating the location of the vehicle to the remote location at first and second frequency. However, Holland discloses communicating the first and second locations of the vehicle to the remote location at first and second frequency, and second frequency different from first frequency (see columns

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2-4, lines 21-17; columns 4-5, lines 49-16; and columns 12-14, lines 15-3). It is obvious that a third location can be determined between a first and second location, and when communicating the first and second location to the remote location, the transmission of the third location should be kept low by suppressing the transmitting when effective no relevant information can be gathered. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teach of Zijderhand by combining communicating the first and second locations of the vehicle to the remote location at first and second frequency, and second frequency different from first frequency for accurately tracking and monitoring vehicle position and differentiate transmit time when vehicle from position to position.

As per claims 2-3, and 15-16, Zijderhand discloses the location of the vehicle is communicated with reference to the road network, and the road network is a map database (see columns 2-3, lines 49-67).

As per claims 23, and 25, Holland discloses the frequencies define a data transmission interval (see columns 2-4, lines 21-18; columns 8-10, lines 35-62; and columns 12-14, lines 15-3).

5. Claims 9-10, are rejected under 35 U.S.C.103(a) as being unpatentable over Zijderhand (5,598,167) in view of Adolph (6,356,836).

As per claim 9, Zijderhand discloses an apparatus for a navigation system for transmitting the location of a vehicle to a location remote from the vehicle, comprising: at least one position determining device for providing a vehicle location signal, a processor interconnected to at least one positioning device and database for determining the location of the vehicle relative to map, and a transmitter for producing a transmission signal to the remote location having the location

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of the vehicle (see columns 2-4, lines 49-15). Zijderhand does not disclose a trigger device.

However, Adolph discloses a trigger device for triggering transmission signal, wherein triggering device determines a location of the vehicle relative to road network defines as a first location and determines a change in the location of the vehicle relative to road network defines as a second location, and trigger device automatically commands transmitter to produce transmission signal based upon the change in location (see columns 10-11, lines 65-52). It is obvious that a third location can be determined between a first and second location, and when trigger device communicates the first and second location to the remote location, the communication of the third location should be kept low by suppressing the transmitting when effective no relevant information can be gathered. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teach of Zijderhand by combining a trigger device for triggering transmission signal, wherein triggering device determines a location of the vehicle relative to road network defines as a first location and determines a change in the location of the vehicle relative to road network defines as a second location, and trigger device automatically commands transmitter to produce transmission signal based upon the change in location for monitoring and transmitting the vehicle position to the remote location to determine real time a position of the vehicle relative to geographic data used by the navigation system.

As per claim 10, Zijderhand discloses the location of the vehicle is communicated with reference to the road network (see columns 2-3, lines 49-67).

6. Claims 13, and 24, are rejected under 35 U.S.C.103(a) as being unpatentable over Zijderhand (5,598,167), and Adolph (6,356,836) as applied to claim 9 above, and further in view of Holland (6,321,091).

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As per claims 13, and 24, Zijderhand does not disclose first and second frequency.

However, Holland discloses first and second frequencies are different, and frequencies are data transmission interval (see columns 2-4, lines 21-17; columns 4-5, lines 49-16; and columns 12-14, lines 15-3). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teach of Zijderhand by combining first and second frequencies are different for determining different transmission signal when the vehicle move from location to location.

7. Claims 4,11, and 17, are rejected under 35 U.S.C.103(a) as being unpatentable over Zijderhand (5,598,167), Holland (6,321,091), and Adolph (6,356,836) as applied to claims 1,9, and 14 above, and further in view of Mathis (5,948,043).

As per claims 4,11, and 17, Zijderhand, Holland, and Adolph do not disclose the location of the vehicle is determined by map-matching. However, Mathis discloses the location of the vehicle is determined by map-matching (see columns 8-9, lines 54-10; and columns 10-12, lines 62-33). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teach of Zijderhand, Holland, and Adolph by combining the location of the vehicle is determined by map-matching to provide information about the actual location of a vehicle as it moves over streets.

8. Claims 7-8, are rejected under 35 U.S.C.103(a) as being unpatentable over Zijderhand (5,598,167), and Holland (6,321,091), as applied to claim 1 above, and further in view of Novik (6,339,745).

As per claims 7-8, Zijderhand and Holland do not disclose the first location is a first street, the second location is a second street, and the first location is a first street address, and the

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second location is a second street address. However, Novik discloses the first location is a first street, the second location is a second street, and the first location is a first street address, and the second location is a second street address (see columns 9-11, lines 66-55). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teach of Adolph, and Holland by combining the first location is a first street, the second location is a second street, and the first location is a first street address, and the second location is a second street address for accurately taking into account additional specific road in which the current location of the vehicle is located, therefore the remote location can accurate detect vehicle at any specific time and locations.

9. Claims 19, is rejected under 35 U.S.C.103(a) as being unpatentable over Zijderhand (5,598,167), and Holland (6,321,091), as applied to claim 14 above, and further in view of Murphy (6,094,164).

As per claim 19, Zijderhand and Holland do not disclose first and second frequencies are based on a distance traveled by the vehicle. However, Murphy discloses first and second frequencies are based on a distance traveled by the vehicle (see columns 7-8, lines 15-63; and columns 10-11, lines 31-9). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teach of Zijderhand and Holland by combining first and second frequencies are based on a distance traveled by the vehicle for generating respective direction and distance traveled of the vehicle.

10. Claims 18, and 20-22 are allowable.

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**Remarks**

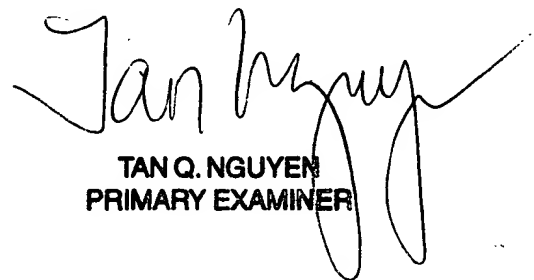
11. Applicant's argument filed on 12/31/02 has been fully considered and they are deemed to be persuasive. However, upon updated search, the new ground of rejection has been set forth as above.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dalena Tran whose telephone number is 703-308-8223. The examiner can normally be reached on M-F (7:30 AM-5:30 PM), off every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Cuchlinski can be reached on 703-308-3873. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-7687 for regular communications and 703-305-7687 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.

/dt  
February 11, 2003

  
**TAN Q. NGUYEN**  
**PRIMARY EXAMINER**